DOCUMENT RESUME

ED 204 645 CG 015 259

AUTHOR Pelcak, Douglas: And Others
TITLE Project BORN FREE: Selected Review of the Literature on Career Development and Sex-Role Stereotyping at the Elementary Level. Technical Report No. 1.
INSTITUTION Minnesota Univ., Minneapolis. Coll. of Education.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Women's Educational Equity Act Program.
PUB DATE 80
GRANT 565AH70023
NOTE 54p.; For related documents, see CG 015 260-273, ED 193 591-596 and ED 150 493-495.
AVAILABLE FROM Education Development Center, 55 Chapel Street, Newton, MA 02160

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Bias: Career Choice: *Career Development: *Developmental Stages: Elementary Education: *Intervention: Literature Reviews: Resource Materials: School Personnel: *Sex Role: *Sex Stereotypes: *Socialization: Training Methods
IDENTIFIERS *Project BORN FREE

ABSTRACT

This literature review, part of the Project BORN FREE training series for teachers, counselors, administrators and parents, focuses on career socialization at the elementary level. Basic areas addressed include: (1) problem identification: (2) theoretical and psychological frameworks: (3) problem causation and the socialization process: and (4) selected interventions and resources. The materials describe the career development conceptual framework which serves as a basis for the Project and examines personality variables, sex roles, parental and teacher expectations, and strategies for reducing career-related sex-role stereotyping in elementary education. (Author/KMF)

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ED204645

Technical Report No. 1

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Project BORN FREE

# SELECTED REVIEW OF THE LITERATURE ON CAREER DEVELOPMENT AND SEX-ROLE STEREOTYPING AT THE ELEMENTARY LEVEL

by

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with contributions by

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Produced by the College of Education, University of Minnesota, under a grant from the U.S. Department of Health, Education, and Welfare, Office of Education, under the auspices of the Women's Educational Equity Act. Opinions expressed herein do not necessarily reflect the position or policy of the Office of Education or the Department, and no official endorsement should be inferred.

Printed and distributed by Education Development Center, 1980, 55 Chapel Street, Newton, Massachusetts 02160.

## ACKNOWLEDGMENTS

At different stages several persons helped bring this document to completion, both in the organizing of ideas and in the format. We would like to give our acknowledgment and thanks to Linda Jones for her editing contributions in the early stages; to Colleen Amundsen for her assistance in the information search; to Gerri Perreault and Barb Lofgren for their assistance in final editing; and to Carol Brightman, Cathy Dingley, Peter Franson, and Betty Jo Johnson for their diligence in typing the manuscript. We are also grateful to the U.S. Office of Education Women's Educational Equity Act Program Staff for their assistance and their support of Project BORN FREE.

The Authors

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# INTRODUCTION

Both women and men are limited in their career development and career decisions by the sex biases and sex-role stereotyping that characterize our society. Far too often the social concepts of sex roles are reflected in the varied explicit and/or implicit direction given to students in schools, colleges and universities. This is one of the basic assumptions of Project BORN FREE, which is a collaborative effort to reduce sex-role stereotyping in educational institutions from kindergarten through college. This review was undertaken to provide a partial base for the development of training materials through which educators and parents can become more aware of ways in which they inhibit or facilitate career development at the elementary level.

Similar reviews have been completed for the secondary and postsecondary/higher education levels. Readers interested in the research and theoretical literature at those levels are referred to those respective reviews.

It seemed clear to the staff of Project BORN FREE that there was considerable evidence of sex-role stereotyping throughout the education system from elementary through post-high school. Having to document their assumptions, the staff undertook two tasks: 1) a subjective analysis of fourteen institutions through clinical observations and needs assessments by staff working in the institutions; and 2) a search of the theoretical and empirical literature along with the interpretive and evaluative research. These studies were undertaken to determine what is really known about career development in the elementary years and what is being done to facilitate or limit that development. What was astonishing to the staff was how closely the clinical observations matched the findings of the literature review. In other words, many of the hunches about the career-related sex-role stereotyping going on in schools were confirmed by both the direct observations and the literature documentation. In spite of this, however, the staff is still aware that there are many areas of knowledge about sex differences and sex-role socialization which are still unknown or controversial. In fact, this review may raise more questions than it answers, and that is one of its purposes--to generate interest in and stimulate thinking about sex differences, sex-role socialization and career options and how they affect behavior.

Career socialization at the elementary level is the focus of this document. The review begins with a section on Problem Awareness, followed by a description of the career development conceptual framework which serves as a basis for BORN FREE materials development. The review then looks at personality variables such as self-concept, achievement needs, expectations, risk taking, locus of control and/or sense of agency. Career socialization is the next focus, defined by the project as "the differential experiences and processes used to prepare females and males for the educational, occupational and lifestyle roles and choices society has defined as being appropriate for their particular sex" (Hansen, 1976). It includes such areas as theories, cross-sex activities, punishments, modeling, teacher and parental expectations, teacher behaviors, and media influences. These are followed by more practical sections describing interventions to reduce career-related sex-role stereotyping and resources useful at the elementary level.

Specifically, the elementary section of the literature review addresses itself to five basic areas: (1) Problem Identification, (2) Theoretical and Psychological Frameworks, (3) Problem Causation and the Socialization Process, (4) Selected Interventions and Resources, and (5) Summary. An ERIC search and a Psychological Abstracts search were completed for this review. These included published works and dissertations from 1970 to the present. A few major works before 1970 were included to produce effectively a review representative of the "state of the art" in this field. Due to the magnitude of resources present and the limitations of human effort, it is not a complete review of all possible works.

Before embarking on a project to reduce career-related sex-role stereotyping at the elementary level, one must show that stereotypes exist among children early in their development. If these stereotypes are present, what are they? At what ages does this stereotyping occur? To what extent do these conceptions influence children's occupational aspirations and choices?

After a review of the literature from kindergarten to college levels, it is Project BORN FREE's orientation that career-related sex-role stereotyping occurs in a developmental manner. Many of our stereotypic attitudes, beliefs, and behaviors have their foundations even in the preschool years. As we continue to change and grow, these limiting factors are more fully developed and accentuated. This is why work at the elementary school level is critical: it is the earliest point (besides preschool) in people's development where educators can attempt to change the conditions which inhibit personal growth because of gender, and to accelerate facilitative interventions to maximize human potential regardless of sex. As will be illustrated in this section, the BORN FREE endeavor to reduce sex-role stereotyping and change the career socialization of the early years is a formidable one.

In order to promote ease of reading and organization, the findings from this review will be presented initially as Generalizations and Implications, with specific studies cited in the text to provide support for the assertions. Generalizations used in this review are based on a summation of previous research and theory. They are not absolute "truths" in the area of career-related sex-role stereotyping or sex differences. In some cases, they may be indicative of a general trend in research data or of facts that are fairly well established. The empirical base of each generalization can be judged by the quantity and quality of research cited in each section. Implications are small discussions relating to the authors' interpretation of how the generalization applies to the goals of Project BORN FREE. It should be stressed that these research findings could best be used by checking them against your own personal experiences. Only by internalizing this research into your own attitudes, beliefs, and behaviors will it become maximally useful. Since the state of the art is imperfect, these generalizations should be tested against your own experiences for their best application.

## PART I: PROBLEM IDENTIFICATION

### Problem Awareness

A. Sex-role learning and occupational stereotyping occur at an early age in a child's development.

Implications: Parents and other significant persons must be made aware of the factors, e.g., socialization, institutions, media, peers, that cause and perpetuate this learning. Strategies and methodologies should be provided to those wishing to modify the effects of these factors.

Many studies have found children in the age group three to five years as having already internalized the "desired" sex-role identification. Fauls and Smith (1956), in presenting pictures of children of each sex performing a "masculine" and a "feminine" activity with their parents, discovered that four- and five-year-old boys preferred the "masculine" activity more than girls of the same age did. Both sexes perceived their parents as preferring the activity "appropriate" to the child's sex rather than the "inappropriate" activity. Studying three- and four-year-olds, Hartup and Zook (1960) found that boys received more "masculine" scores on a scale to differentiate "sex-appropriate_ interests and behaviors (the It Scale) than girls did. Vroegh (1970), however, provided a unique sort of evidence that this "sex differentiation" was not as evident at this early age. In utilizing teacher judgments of the "masculinity" or "femininity" of picture drawings by three- to five-year-olds, it was found that only 15 percent of the drawings were differentiated according to sex. However, the subjectivity of teacher judgments makes the results of this study questionable.

Sears, Rau, and Alpert (1965), using an "area usage" test to discern the degree of sex-typing activities, discovered that four-year-old boys spent more time in a nursery where blocks, wheel toys, and tools were located, while girls spent more time in areas having dress-up clothes, cooking utensils, and doll houses. In response to the question whether they'll be "mommies or daddies," Thompson and Bentler (1973) found children aged 4-6 responding sex-appropriately, with only one exception. Overall, it is clear that children internalize a large portion of their sex-role identity before they enter the elementary schools.

Just as children develop their own conceptions of sex roles at an early age, stereotyped attitudes and aspirations in the area of occupations are also evident at the elementary level. Looft (1971), studying boys and girls aged 6-8, discovered that boys and girls named occupational categories congruent with traditional stereotypes. When asked, "What do you want to be when you grow up?" girls listed such jobs as nurse and teacher while boys mentioned such occupations as football player, policeman,* doctor, dentist, and scientist as possible for themselves.

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*Although it is recognized that the Department of Labor has renamed many occupations to avoid sex-typing, where studies are reported in this review the names of the occupations as they were listed in the various studies are retained. It is desirable, however, whenever possible to use the non-sex-typed occupational label, e.g., police worker instead of policeman, mail carrier instead of postman.

Other studies have reaffirmed that children in elementary school are stereotyped in their occupational outlook (Siegel, 1973; Schlossberg and Goodman, 1972; Parks, 1976; Bacon and Lerner, 1975; and Beuff, 1974).

Tibbets (1975) and Beuff (1974) have found this stereotyping indicative of premature occupational foreclosure, the tendency to choose too early from a narrow range of occupations, consistently present in similar forms in grades K through six. This will be covered in more detail in Generalization II.

What are the activities, institutions and behaviors that facilitate and perpetuate these attitudes among children? What experiences and attitudes foster the development of a broader range of interests in girls and boys? How do child-rearing practices, teacher behaviors and the media influence children's perceptions of sex-appropriateness of interests, subjects, and activities in ways which may limit or expand career options? These are some of the questions to be addressed in the next sections.

B. Boys see more occupational areas as being possible to them, and over a broader range of fields, than do girls at the elementary level.

Implications: Girls and boys should be provided with opportunities to expand their awareness of and interest in the many career possibilities open to them. This expansion will probably have a greater effect on the career awareness of girls, considering that they see themselves as more restricted in their potentialities. The emphasis for both sexes should be to prevent occupational foreclosure, i.e., narrowing or eliminating options at too early an age.

Girls see a more restricted range of occupations as possible for themselves in the future than boys do. Siegel (1973) found that boys chose twice as many occupations as possibilities for careers as compared with girls. Only two common "most desirable" occupations were mentioned by both sexes. Schlossberg and Goodman (1972), studying kindergarten and sixth grades in middle-class and model city elementary schools, noted that children excluded more women from traditional "men's" jobs than vice versa, hypothesizing that women are viewed by children as being more restricted in abilities than men. In a study by Looft (1971), girls saw a more restricted range of occupations open to them in the future. Boys also were more susceptible to encouragement to reconsider and change their initial occupational choices than girls. This restricted view of occupational possibilities has been thoroughly substantiated in other studies (Iglitzin, 1972; Parks, 1976).

It is clear that there is a need to prevent foreclosure of occupational possibilities in children at the elementary level. Recognition of the multipotentiality of children mandates that educators and parents strive to increase and encourage the range of their occupational awareness, regardless of sex. Several theoretical frameworks of career development have been developed which aim not only to prevent foreclosure but also to facilitate growth positively.

## PART II: THEORETICAL AND PSYCHOLOGICAL FRAMEWORKS

### Career Development Models

Several developmental models have been formulated as a basis for career development education programs in elementary and secondary education. It is proposed in Project BORN FREE that career education for individuals, which begins with experiences and influences in the preschool and elementary school years, provides a natural basis for exploring problems of career options and sex-role stereotyping. If, as the literature suggests, occupational stereotyping occurs early in a child's development and children engage in premature narrowing of educational and occupational possibilities, it is important that intervention programs be created developmentally to deal with stereotyping aspects of career development. A few selected models which offer partial frameworks or departure points for problems of career socialization are described below (Gysbers, 1969; Tuckman, 1974; Tennyson, Hansen, Klaurens, and Antholz, 1975).

#### Career Development Curriculum (CDC)

The Career Development Curriculum (CDC) created by Tennyson, Hansen, Klaurens and Antholz in 1969 and formally published in 1975 has formed the conceptual base for the development of materials for Project BORN FREE. Drawing from the developmental theories of Havighurst, Piaget and Erikson and from career development theorists, the authors have identified critical developmental or management tasks for the primary and intermediate levels. They identify levels K-3 as the attending stage and levels 4-6 as the responding stage. The tasks, which may be equated with global goals, have been further subdivided into specific performance objectives (desired outcomes) and enabling objectives (means to achieve outcomes). Learning strategies and activities were developed and the model has provided the base for several state and national career development programs, including those in Roseville, Minnesota, and Mason City, Iowa. The Agency for Instructional Television also used the CDC as its conceptual base in the educational TV film series for 9-12-year-olds entitled bread and butterflies.

The career management tasks of the CDC along with an explanation of the rationale for placement of the tasks at the various levels are presented below. The authors have attempted to integrate objectives related to sex-role stereotyping and changing roles of women and men into the CDC. While the model does not explicitly address sex-role stereotyping in every objective, it is expected that mastery of the tasks by both girls and boys will greatly facilitate pupils' career development.

Attending Stage (K-3)

1. Being aware of self
2. Acquiring a sense of agency
3. Identifying with workers
4. Acquiring knowledge about workers
5. Acquiring interpersonal skills
6. Having ability to present oneself objectively
7. Acquiring respect for other people and the work they do

Responding Stage (4-6)

1. Developing a positive self-concept
2. Acquiring the discipline of work
3. Identiyfing with the concept of work as a valued institution
4. Increasing knowledge about workers
5. Increasing interpersonal skills
6. Increasing ability to present oneself objectively
7. Valuing human dignity

Attending Stage

1) Being aware of self: At this stage, the child begins to differentiate self from environment, going through the processes of differentiation/integration and accommodation/assimilation. Out of this the child begins to develop a positive self-concept and sense of identity.

2) Acquiring a sense of agency: This task is related to self-awareness; the child has the need to see self as a separate being and causal agent. A child needs success in early encounters with any task to retain the confidence and desire to continue. The more a child acquires a sense of agency, the more responsibility is taken for her/his own fate.

3) Identifying with workers: At this stage, the effect of role models upon the child is powerful (Tiedeman and O'Hara, 1963):

> Children now also attach themselves to teachers and the parents of other children and they want to watch and imitate people representing occupations which they can grasp--firemen and policemen, gardeners, plumbers and garbagemen (Erikson, 1968, p. 122).

The child begins to feel, "I am a worker" (p. 108).

4) Acquiring knowledge about workers: Here the child acts as an active agent in learning about "visible work" in the home and community. The more knowledge a child obtains, the less likely it is that the child will develop misconceptions and negative attitudes.

5) Acquiring interpersonal skills: The child must learn how to cope with authority and age-mates. Evidence exists (Pressey and Kuhlen, 1957) that children not accepted by peers in the elementary years are likely to have difficulty all of their lives (p. 109).

6) Having ability to present oneself objectively: By recognizing other people's "humanness" the child can recognize her/his own "humanness." Simon (1966) views this as a three-step process: "I" (others as objects), "Thou" (objective self), and "I-Thou" (relate to others honestly and intimately). Children are ready to begin actively participating in this process at the primary level, provided they are given a relatively safe place to reveal themselves (p. 109).

7) Acquiring respect for other people and the work they do: As an additional step to prevent foreclosure, the child should learn to value all workers and realize the interdependency of different jobs.

Responding Stage

Having completed concrete operations and now undergoing the transition from perceptual process to conceptual, the child begins to conceive of the function of occupations.

1) Developing a positive self-concept: Super, Starishevsky, Maltin, and Jordaan (1963) have identified the process of career development as that of developing and implementing a self-concept. Now that the child can conceptualize perceptions, the transition from self-awareness to self-concept takes place.

2) Acquiring the discipline of work: Here the child must move toward a feeling of mastery about the environment--similar to a sense of agency previously mentioned.

3) Identifying with the concept of work as a valued institution: There is a great need for a child to internalize the value of work into a personal value at this time:

> If this value is not internalized, it becomes very difficult for [children] to achieve self-direction. The probability that they will work only because and when others want them to remains high. This in turn has a deleterious effect on their ability to achieve the discipline of work or a positive self-concept (p. 111).

4) Increasing knowledge about workers: The child's knowledge must expand beyond the home and community through active encounters with the work world.

5) Increasing interpersonal skills: Peer activities and cooperation are vital at this level for later development. Activities in later years will depend on their success in early experiences.

6) Increasing ability to present oneself objectively: This level is similar to the activities at the primary stage, except the level of complexity and risk is higher. The more competent a child is at this task, the more it will aid later in development.

7) Valuing human dignity: Admittedly, a lofty goal but the child should develop some appreciation of the interdependence of humankind. Individuals need to value all people in order to value themselves.

For examples of how the CDC can be translated into career development education programs and activities in the elementary school, see Tennyson et al. (1975); AIT (1974); Hansen, Klaurens, and Tennyson (1973); and "A Career Development Curriculum Framework for Counselors to Promote Female Growth," Hansen (1974). The authors suggest basic strategies for implementation of career development programs, including 1) infusing through curriculum, 2) exploratory work experiences, 3) multimedia, 4) career resource centers, 5) individual, group and peer counseling,

6) in-service training, and 7) role models. Any of these strategies can incorporate activities or emphases to reduce sex-role stereotyping.

Although the CDC provides the major framework for BORN FREE, two other models are described to provide elementary staffs with a choice from several developmental ones. The CDC is the only one of these which consciously attends to tasks related to changing roles of women and men.

Tuckman's Age-Graded Model for Career Development Education (1974)

Another model which draws on the developmental theorists is that of Tuckman (1974). Integrating the work of Harvey, Hunt and Schroder, Erikson, Piaget, and Ginzberg, Tuckman divided career development strategies in elementary school into five levels: Unilateral Dependence (K-1, Age 5-6), Negative Dependence (Gr. 1-2, Age 6-7), Conditional Dependence (Gr. 2-3, Age 7-8), Interdependence (Gr. 4, Age 8-9), and External Support (Gr. 5-6, Age 10-11). Presentation of the model will focus on summaries of the stage's rationale and activities.

Stage 1: Unilateral Dependence (K-1, Age 5-6)

At this level, children's major orientations are toward external control, that is, the use of external criteria for evaluating their behavior. Ginzberg sees children operating at the "Fantasy" level while Erikson postulates that they are trying to resolve the conflict of "Trust vs. Mistrust." In addition, Piaget's stage of pre-operational thought is present in the child's development (p. 196). Tuckman asserts that three conditions must be present for children to enter the next stage of development: (1) Permission to oppose authority, (2) trust, and (3) opportunities for independence (p. 196).

Turning to activities related to career development, Tuckman states that the major themes at this stage should be "career awareness," i.e., giving children some ideas on the nature of work and tools. Tuckman believes that little can be done at this level because of the age and cognitive level of the children. However, by concentrating on the wide range of work around them (home, relatives) occupational foreclosure and some stereotypic attitudes might be prevented or reduced (p. 197).

Stage 2: Negative Independence (Gr. 1-2, Age 6-7)

Here children have shifted to a position of opposing external control and are trying to focus on self and internal control. Still in the level of "Fantasy" and the transition period between Piaget's pre-operational thought and concrete operations, children are now trying to deal with Erikson's "Autonomy vs. Shame" (Am I my own master?). It is proposed that autonomy, freedom to set their own standards, and encouragement to socialize are necessary for children to grow into the next stage (pp. 197-198).

Strategically, activities here should emphasize the development of self-awareness among children, examination of their interests, cross-cultural information, and information about work climates. In the area of career decision making, the realization that people "choose" is a critical factor for children. The need for internal control at this level makes it the ideal starting point for emphasizing the development of "sense of agency" among children (p. 198).

Stage 3: Conditional Dependence (Gr. 2-3, Age 7-8)

Still in the level of "Fantasy" and into the stage of concrete operations, children are very concerned with pleasing others, empathy, and developing social standards. The need of "being accepted" exists. Trying to resolve the problem of "Initiative vs. Guilt" (What do my peers expect of me?), the children at this stage need to feel a sense that they are accepted by their peers. Successful interactions and play experiences are vital to development (pp. 199-200).

In the area of self-awareness, examination of individual motives, needs, and orientation is necessary. To expand career awareness, knowledge about work climates, work expectations, why other people work and what we/others gain from it should be emphasized. Helping children realize that they actively utilize the process of choosing in their daily lives can be accomplished through activities where children can "practice choosing" under simulated conditions. Promoting awareness of the elements of the decision-making process is also possible. Games, projects, and field trips are recommended activities (p. 200).

Stage 4: Interdependence (Gr. 4, Age 8-9)

Similarly to Stage 2, the children again feel the need to increase their feelings of independence from adults and begin to rely on themselves and past experiences. Others are used as sources of information rather than standards for behavior. The child has a need to explore his/her environment and willingly accepts and desires new challenges. Again, located in the stages of "Fantasy" and concrete operations, they are conflicted over Erikson's postulated "Industry vs. Inferiority" (What am I capable of?) (p. 201).

Self-awareness activities should stress children's examination of their own skills and competencies. In the area of career awareness, the various kinds of jobs in the community should be emphasized, along with analysis of how these jobs relate to society's needs. In addition, active training in the decision-making process should continue. Media and games might combine observation by children with their active participation in the activities (p. 202).

Stage 5: External Support (Gr. 5-6, Age 10-11)

Once again, the child moves into a level where needs are concerned with obtaining approval from external sources, and behavior is guided by these indices. The transformation from Ginzberg's "Fantasy" stage to "Tentative" (interests) takes place while the child is still in Piaget's period of concrete operations. Support from "external agents" (parents, teachers), along with gradual promotion of the child's independence, is necessary for progression into higher stages(p. 203).

Along with emphasizing examination of children's interests and aspirations, "work roles" and job requirements are suitable topics to promote career and self-awareness. Also, development of the children's decision-making processes should be facilitated (p. 204).

Overall, Tuckman's model does not provide very concrete and practical suggestions for career development strategies at the elementary level. What it does accomplish, however, is to provide another developmental framework for designing

useful activities. It should be stressed that diagnosis of individual children's needs in the areas of career development and sex-role stereotyping, along with acknowledging the developmental levels of our children, should provide a base for program development. Different programs may be appropriate at different grade levels. Using only one approach for levels K-6 will be counter-productive to the goal of using the most effective methodologies available to meet a variety of needs.

Gysbers' Model for Promoting Career Development in Elementary School (1969)

One of the early developmental statements was that of Gysbers (1969), who recently has expanded on his earlier formulation (Gysbers and Moore, 1974). Gysbers' framework is of value in its relating career development programs to three phases a learner goes through during schooling:

1) Perceptualization--the process where the child becomes aware of self and environment and is able to differentiate between them.

2) Conceptualization--more action-oriented than perceptualization; the child begins to conceive of different occupational functions. Concept formation is directional and children begin to value some things and not others:

> This is a critical time in career development in that this is where both positive and negative work world strategies begin to form (p. 4).

3) Generalization--here the individual can cope with cultural and environmental demands, make internal interpretations about the environment, and generalize these concepts to other situations.

Gysbers views perceptualization occurring around early elementary school, conceptualization at later elementary levels, and generalization in junior and senior high levels. Once all three phases are "operatized," individuals will use them all at the same time and continue to develop and refine these skills.

The main emphasis in this model is to prevent elementary children from making premature decisions about educational and occupational possibilities.

> Elementary age youth need the opportunity to continuously and systematically explore, from an internal frame of reference, their values, attitudes, aptitudes, and interests in relation to the wider range of educational and career opportunities which may be available to them so that they will avoid premature educational and occupational foreclosure (p. 3).

Along with arranging programs to increase the child's ability to grasp (perceptualize), transform (conceptualize), and transfer (generalize), career development programs should concentrate on the areas which need development as well as on the child's strengths.

In levels K-3, Gysbers asserts, career development programs should expand the perceptual base of the child in all aspects of the work world. Activities in the kindergarten may emphasize helping children find out "who they are" and how

they are similar and different from others around them. Levels 1, 2, and 3 should highlight the workers and the variety and interrelatedness of occupations around the home and school environment. The nature of work, who works, and why people work can be the focus. A wide variety of occupational role models can be employed as effective methods.

Gysbers believes these activities should be structured to develop the child's skills of (1) listening, (2) observing, (3) contrasting, (4) differentiating, (5) thinking, and (6) manipulating. Overall, the goal of career development programs at K-3 levels appears to be facilitating a broad experiential base among students:

> ...to fund students with a broad range of perceptual experiences (skills) concerning the work world, so that when the conceptual phase occurs, they will be able to base their actions (conceptions) on a wider range of meaningful experiences (p. 7).

Level 4-6 is a continuation of the child's exploration of the relationship of self to the work world. More action-oriented, the child can now begin to conceptualize subtle differences about occupations and value certain aspects of jobs. Concentration on the knowledge and skills involved in career decision making is critical. Various "action activities" can be employed at this level that emphasize cooperation with others, such as group counseling, life-career gaming and work simulations.

Although Gysbers' early model did not provide a concrete, detailed plan for career development activities, his three phases of learning are important considerations in program implementation. His more recent formulation of the career-conscious individual and the implementation guide appear in several publications (Gysbers and Moore, 1974). The model does not consciously attend to matters of sex-role stereotyping but offers a framework in which such emphases could and should be added.

Having examined a career development theoretical framework as a basis for children's career growth and program interventions, it is important to consider personality variables and how they affect attitudes about self and career options in the elementary years.

## Personality Variables

Several personality variables have been identified as critical in the promotion of career development at the elementary school level. This literature review focuses on these variables in order to ascertain what is known from the psychology of sex roles and career development literature about what significant sex differences exist. The variables are self-concept, needs for achievement, risk taking, locus of control or sense of agency, and expectancy of success. Again, a format of Generalization and Implications will be used to present the findings from the review. It should be noted that the literature on the psychology of sex differences and on the relationship between early socialization and later life career choices is yet incomplete. While some authoritative sources suggest clear sex

differences in certain areas of development, they also note these areas are few, with many studies revealing conflicting results and other areas not studied yet (Maccoby and Jacklin, 1974; Block, 1976). Also not yet clear is the extent to which sex differences, where they do exist, are the result of genetic or cultural factors. A critical question is, what is the myth and what is the reality; and how does what we believe about sex differences affect the way we as educators treat boys and girls?

A. On many personality variables--self-concept, need for achievement, risk taking, and locus of control--no significant sex differences appear to exist at the elementary school level.

Implications: These findings imply that many of the differences in level and content of children's career awareness and aspirations are not the result of personality differences between the sexes. This should promote the investigation of other external causal factors (i.e., socialization, media, peers, parents) to identify critical areas to modify in order to reduce sex-role stereotyping in career development.

In order to summarize the plethora of studies in this area, excerpts from Maccoby and Jacklin's The Psychology of Sex Differences (1974) will be utilized. Their comprehensive reference on sex differences summarizes about 1,600 studies and concludes that there are a number of "unfounded beliefs," some "fairly well established differences," and areas in which the evidence is conflicting. The monumental work has been severely criticized by Block (1976), however, as having drawn debatable conclusions.

Dealing with the area of self-concept, numerous studies show a strong trend toward no sex differences on this variable at the elementary level. For example, Long, Henderson and Ziller (1967) tested children aged 6-13 on tasks where they were required to manipulate diagrams designed to be indicative of their self-esteem (the Children's Self-Social Constructs Test). No sex differences were found. Another study, Lekarczyk and Hill (1969), using a revised Coopersmith Self-Esteem Inventory with children aged 10 and 11, again discovered no differences in responses with regard to sex.

Despite a few studies that show either males or females with higher self-esteem scores, most of the investigations with children at the elementary level reveal no sex differences in self-concept (Goldschmid, 1968; Klaus and Gray, 1968; Lepper, 1973). Maccoby and Jacklin (1974) state: "The similarity of the two sexes in self-esteem is remarkably uniform across age levels through college age" (p. 153). It is of interest to note that studies in which children's self-esteem has been rated by teachers sometimes result in girls receiving higher scores, even though the same boys and girls do not differ on self-ratings (Coopersmith, 1959, 1967). Is this incongruity indicative of teacher stereotyping of children's behaviors on the basis of sex?

Need for achievement (N-Ach) studies have been more clear-cut in their findings for elementary-age children. Masters and Christy (1973), using self-reward for tasks of variable difficulty as the criterion, found no sex differences in N-Ach among 7-year-olds. Self-imposed performance standards as a measure of N-Ach yielded no significant sex difference in Bandura and Perloff's (1968) work with 7-to-10-year-olds. No sex differences in N-Ach appear to be present at the

elementary level. However, at later ages males "may show more arousal of this motivation (N-Ach) under directly competitive conditions" (Maccoby and Jacklin, p. 149). These conditions have not been tested with children at the ages of 6 to 12.

Related to need for achievement is the level of risk taking present: if a child opts to perform a difficult task, there is an increasing risk of failure at the task. Not surprisingly, no sex differences between elementary children occur on this variable. Slovic (1966), working with ages 6 to 10, and Kopfstein (1973), using similar tasks with 9-year-olds, have verified this conclusion.

A critical factor in career development is the extent to which an individual perceives an internal locus of control; that is, the extent to which individuals feel in control of their own fates, analogous to a "sense of agency":

> In recent years, measures have been developed for the "locus of control," and individuals may be characterized on whether they normally feel that the events affecting them are the result of luck or chance (externalizers), or whether they feel that they can control their lives through their own actions (internalizers) (Maccoby and Jacklin, p. 157).

The sexes do not differ consistently on this dimension through grade school and high school years (Crandall and Lacey, 1972; Walls and Cox, 1971; Dweck and Repucci, 1973). These studies indicate that children in the elementary years are not sexually differentiated on this variable.

B. Boys have a higher expectancy of success on tasks than do girls.

Implications: Tasks must be modified in the schools and home environment to enable girls to attain success and thus confidence in their abilities to achieve in task situations. Self-confidence is an important variable to promote in a child's development.

In measuring children's expectancies of task success, Crandall (1969) had children aged 7 to 12 predict their level of success on a task with eight gradations of difficulty. It was found that boys had higher overall success expectancies and higher individual success expectancies. Montanelli and Hill (1969) produced similar results. In a marble-dropping game, it was noted that ten-year-old boys had a higher expectancy of individual task success than girls. It may be that girls were more realistic about their abilities but, at the elementary level, their expectancy for achievement is lower than that of boys. Strategies to improve the self-confidence of girls in task performance should be attempted.

C. Perception of subject areas, in regard to sex-appropriateness of these areas, will affect children's achievement in these areas. A child's need achievement, attainment value (the benefits of achieving a task) and expectancy of success are influenced by the perceived sex-role appropriateness of a task.

Implications: Awareness of the influences on how children judge these tasks to be appropriate to either sex, i.e., peer influence, teacher behavior, parental input, should be promoted, and methods to modify these perceptions should be explored.

In one of the most striking hypotheses thus far, it is surprising to discover that a child's outlook and achievement on a task can be significantly influenced by her/his perception of its sex-appropriateness. Dwyer (1974), studying students in grades 2 through 12, assessed their sex-role standards about various subject areas by a checklist. It was found that sex-role standards contributed significant variance to reading and math achievement scores, with a stronger effect occurring for males. This led to the conclusion that achievement is a function of a child's perception of task sex-appropriateness more than it is linked to a child's biological sex, individual sex-role preference, or liking or disliking of the task.

Studying need for achievement (an individual's need for task success, N-Ach) and two of its determinants, expectancy of success (confidence in task completion) and attainment value, Stein, Dohby, Pohly, and Mueller (1971) worked with 11-year-olds and presented them with the same task labeled as (1) masculine, (2) feminine, and (3) neutral. Results showed that boys' expectancy of success and attainment values were highest on masculine and lowest on feminine tasks and girls' expectancy of success was lowest on masculine tasks. In addition, while boys spent more time on masculine tasks and liked the masculine tasks most and the feminine least, girls spent the same amount of time per task and liked all equally well. Stein asserted that these results were indicative that some aspects of N-Ach were influenced by the sex-appropriateness of the task--subjects having higher expectancies in sex-appropriate tasks. Similarly to Dwyer, Stein hypothesizes the results as illustrating the greater pressure on pre-adolescent boys than girls to behave in a sex-appropriate manner.

Both Dwyer's and Stein's works support assertions by Kohlberg (1966) that sex-typed labels are sufficient to influence a child's motivation for an activity and that individual differences in level of sex-role identification are a relatively unimportant factor in this area.

In our next section, we will attempt to determine some causal factors in the socialization process that may precipitate the career-related sex-role stereotyping problems previously discussed.

## PART III: PROBLEM CAUSATION AND THE SOCIALIZATION PROCESS

### Theories of Socialization

As previously substantiated in the section on problem awareness, children adopt sex roles and stereotyped career aspirations at an early age. A critical question to investigate is in what ways these characteristics are acquired and perpetuated in children. What processes should educators and parents be made aware of in order to reduce the limiting effects on the development of children?

Congruent with the previous sections of the review and based on empirical studies, various Generalizations will be suggested about the socialization process and its Implications for educators and parents. This section offers documentation for those interested in the goals of Project BORN FREE, individuals who may wish to take action to modify the effects of career socialization on children as well as on their own career development.

After examining three major theories of development of sex-role socialization--psychoanalytic, social learning, and cognitive-developmental models--this section will investigate the dynamics of family and school socialization. Because of their comprehensive abstracts and summaries of previous research, Maccoby and Jacklin's The Psychology of Sex Differences (1974) and Undoing Sex Stereotypes by Guttentag and Bray (1976) were vital resources in this section.

A. Many theories exist on how children are socialized in their sex roles and attitudes, each with their own assumptions and assertions. Three important factors are emphasized in these theories: 1) the importance of the child's modeling behaviors of significant others, 2) the role of differential reinforcement of children's behavior on the basis of sex, and 3) the child's conception of what is "masculine" (male) or "feminine" (female) and comparing how s/he "fits" according to this perception of an appropriate role.

Implications: Although many theories exist on sex-role socialization, none has been pinpointed as the "right" one. Despite this fact, the importance of modeling, differential reinforcement, and role comparison as socialization influencers cannot be ignored. Those wishing to change and/or modify stereotypic roles and attitudes should look to these processes as possible foci of change in children's growth.

Three theoretical positions--psychoanalytic, social learning, and cognitive development--have been influential in explaining what they consider to be important interactions with children that affect sex-role socialization.

### Psychoanalytic Model

The psychoanalytic perspective, with its Freudian foundations, hypothesizes that the young child initially identifies with his/her mother. For the young girl, this dependency is solidified through an "anaclitic dependency and comradeship with the supposedly 'castrated mother'" (Guttentag and Bray, p. 15). Young boys supposedly give up their identification with the mother because of their fear of

the more powerful father. Mother's values are rejected and the boy switches to father identification. Within this theoretical framework, sex roles are learned by direct imitation of the "appropriate parent." Although this explanation is rejected by most psychologists today, it does pinpoint the critical role of modeling in sex-role socialization. However, as we shall discuss later, children can learn behaviors through modeling by either parent. "Children of either sex are as apt to copy nurturant qualities from the mother's role as powerful qualities from the father's role" (Guttentag and Bray, p. 15).

Social Learning Model

Proponents of social learning theory assert that socializing agents differentially reward children's behaviors on the basis of sex. Here it is thought that the concepts of "masculine and feminine characteristics" are "fixed in the parents' mind" and that children's behaviors are compared to these "ideal sex-role models" (Guttentag and Bray, p. 15). Social learning theory points to the importance of the contingencies-reinforced behaviors, discipline, etc., which may predict the sex-role attitudes and behaviors of the children (Guttentag and Bray, p. 15). Differential behavior towards children on the basis of sex is the key process identified in the theory.

Cognitive-Developmental Model

In cognitive-development theory, "sex-role identity is as much a part of the internal cognitive development as is gender identity" (Guttentag and Bray, p. 15). When the child is able to label him/herself as a "male" or "female," s/he will behave appropriately according to these sex roles. The development of this sex role remains under cognitive control by internal factors; sex-role attitudes and behaviors can be predicted and be mirrored by the child's conceptual growth. Role comparison is the key socialization aspect pinpointed here.

Modeling, differential reinforcement, and role comparison all play a part in the learning and perpetuation of sex-role attitudes and behavior. "Children do imitate role models, parents to intervene and influence children about sex-role related behaviors, and children do believe differently about sex roles for themselves at different ages" (Guttentag and Bray, p. 16). Specific findings concerning the effects of these socialization processes will now follow.

Socialization Process

B. From previous studies, differential reinforcement and role comparison seem to be the most significant factors in sex-role socialization. However, parental behaviors toward children are still found to be quite uniform with regard to sex of the child. Due to this perspective, it seems that peer and teacher behavior towards children may play a major role in sex-role socialization.

Implications: Parents, teachers, and peers must be made aware of aspects of their behaviors that are differentiated on the basis of sex. Special emphasis must be put on identifying and changing the teacher behaviors that cause, affect, and perpetuate stereotyping in the areas of sex roles and career development. By promoting this awareness, the opportunity to change and/or modify these behaviors to Build Options, Reassess Norms, and Free Roles through Educational Equity (as BORN FREE seeks to do) is widely expanded.

Some differential reinforcement does seem to exist by parents with regard to a child's sex.

- Girls have greater latitudes in their actions (can do "male" and "female" activities; "tomboy" is permissible, than boys (can do only "male" activities; "sissy" is not acceptable).

- Boys receive more punishment and sanctions for inappropriate actions than do girls.

- Variables such as a) amount of interaction between parent and child, b) amount of verbal interaction between parent and child, c) parental warmth, d) independence granting, e) rewards for dependency, f) rewards for aggression, g) praise, reward, and positive feedback, and h) achievement pressure showed no consistent or significant sex differences.

Implications: Special opportunity must be provided for "freeing-up" activities so that the only prerequisite for entrance into them is the child's humanness, abilities and desires, not the arbitrary qualification of gender. Especially at the elementary level, this will probably entail more "permission" by significant others for boys to engage in cross-sex activities. The importance of early activities for children and their implication for sex-role stereotyping and career development is clear: By prematurely foreclosing options for children, the opportunity for stifling human development is evident. As for the sex differential that exists in punishment, many implications must be considered: Are the motivations for certain punishing behaviors by adults sex-influenced by the gender of the child? Do boys simply "need" more punishment? Do more punishments enable boys to more successfully critique their own behaviors to enhance later independence and development of internal locus of control?

A review and critique of studies dealing with the differential socialization of boys and girls by parents reveals several limitations among the works. First, most of the studies have dealt with comparisons within sex, not between sex:

> Most researchers have been interested in the question of what makes some boys more masculine than others, or some girls more feminine than others...there is an assumption underlying this practice...that if we know what makes some boys more masculine than others, we will automatically have discovered what makes most boys more masculine than most girls (Maccoby and Jacklin, p. 304).

Second, most of the studies on differential socialization deal with children under school age, assuming that parental influences lessen when the child enters school and the impact of parents is greatest in the younger child. By adopting these assumptions, however, important data are ignored in the area of parental influencers in the school years.

So it is important first to examine the major differences in parental socialization of boys and girls, that a) girls are able to engage in a greater variety and range of cross-sex activities than boys, and b) boys receive more punishment and sanctions from parents than girls for inappropriate behavior.

## Cross-Sex Activities

Many studies have substantiated that girls possess greater latitude in cross-sex activities than do boys. Hartup and Moore (1963) found, for example, that boys were more likely to play with sex-appropriate toys than were girls, especially in the presence of an experimenter (indicative of effects of social pressure on boys to avoid cross-sex activities). In a study by Lansky (1967), parents were presented with hypothetical anecdotes where a boy or girl was choosing a masculine or feminine activity. When boys chose feminine activities, both parents reacted very negatively, especially the father. When girls chose the masculine activities, neither parent was very concerned. Fling and Manosevitz (1972) have obtained similar results, that is, the presence of greater parental sanctions to cross-sex activity choices. Reaction against a boy's display of "feminine" characteristics or activities by the father was very vehement in almost all studies, especially the work of Goodenough (1957).

Maccoby and Jacklin (1974) hypothesize that greater parental sanctions for boys' cross-sex behavior has its roots in parental fears of potential homosexuality in their sons:

> Although the dynamics underlying this parental reaction are not clear, it would appear that feminine behavior in a boy is likely to be interpreted as a sign of possible homosexual tendencies, and, as such, it is perhaps especially in fathers (p. 339).

The long-range effects of this cross-sex activity limitation is evident for both sexes--the blockage of human potential, desires, and interests based on the "qualification" of gender. What can be done to modify this pattern? Lee and Gropper (1974) have asserted that by providing "permission" for children to engage in the activities of their interests (especially cross-sex interests)--placing our authority and approval behind the child overtly--both parents and teachers can facilitate interest and ability as the only criteria for participation in activities. Continued intervention of this type would begin to eliminate sex stereotyping of behaviors and activities.

## Sanctions and Punishments

It is also clear that boys receive more negative sanctions and punishments than girls. Observational studies of parents and their children by Minton, Kagan, and Levine (1971), parental interviews by Block (1973), and child interviews by Siegelman (1965) substantiate this finding, along with a myriad of other studies (see Table 9.8, Maccoby and Jacklin, 1974, p. 331). The implications for this finding lie in the motivations for this sex difference: Do boys simply need more punishment (see generalization that boys are more aggressive than girls)? Do our sex stereotypes affect the ways in which we punish our children? As for long-range implications, does the presence of more negative sanctions and punishments enable boys to critique their own behaviors more successfully and to enhance later independence and develop internal locus of control?

No Sex Differences

Other variables reveal a striking uniformity in socialization of boys and girls by parents. Areas such as amount of interaction between parent and child (Hatfield, Ferguson, and Alpert, 1967; Clarke-Stewart, 1973); amount of verbal interaction between parent and child (Moss, 1967; Beckwith, 1972); parental warmth (Moss, 1967; Baumrind, 1971); independence granting (Clarke-Stewart, 1973); rewards for dependency (Clarke-Stewart, 1973; Baumrind, 1971); rewards for aggression (Rothbart and Maccoby, 1966; Levitin and Chananie, 1972); and achievement pressure (Baumrind, 1971; Callard, 1968) showed no consistent or significant sex differences. Maccoby and Jacklin have commented on this "surprising" finding:

> It is widely assumed that parents do a great deal during the child's early life to define for the child what sex-appropriate behavior is, and to guide the child directly toward the adoption of this behavior. Our survey of the research on socialization of the two sexes has revealed surprisingly little differentiation in parent behavior according to the sex of the child (pp. 338-9).

Citing this uniformity on socialization, it seems that the cognitive-developmental position of role comparison--that children selectively imitate persons congruent with their sex-role conceptions, usually around the ages of five and six years--is a relevant and critical theory. To evaluate this position, we must examine the role of modeling and selective imitation in the socialization process in the next section.

C. Overall, the behaviors acquired by children through modeling behavior do not seem to be sex-typed. However, if a child selectively attends to same-sex models, a sex-typed behavioral repertoire may develop. Modeling of powerful and nurturant individuals may be more critical in this area.

Implications: In order to modify and/or change existing stereotyped behaviors, or to become aware of their origins and perpetuators, we must attend to the significant figures involved in socialization. Have we selectively attended to models on the basis of sex? What effects have powerful and nurturant figures had in our own lives? What effects have they had on our career perceptions? By becoming aware of the socializing influencers in our own lives, we can be more open to changing our own adult behaviors, as well as those of children.

To modify stereotyped attitudes and behaviors in children through modeling, several strategies may be used: a) Encouragement of associations between children and adults that engage in cross-sex activities or nontraditional careers. Powerful and/or nurturant figures are extremely significant models; b) Discussions with children about the various activities and attitudes of models we observe them attending to in their lives with regard to sex-typing and careers.

The most striking feature of this hypothesis is that children do not naturally attend to same-sex models when there is more than one available. Bandura and Huston (1961), Hetherington (1965), and Hetherington and Frankie (1967) have established that children will imitate the more dominant, powerful, and nurturant figure when there is more than one model available. "Within a given

family, then, if the mother is the more nurturant figure, children of both sexes should imitate her for this reason; if the father is the dominant figure, children of both sexes should imitate him for this reason" (Maccoby and Jacklin, p. 286). It is clear from these studies that children learn many behaviors from their parents through imitation but, as we shall further establish, these behaviors are not naturally sex-typed.

Is it possible that models of one sex are more available to children than the other? Maccoby and Jacklin address this question by asserting that both boys and girls do have "frequent" exposure to models of both sexes, if not by direct exposure at least through the media (which may provide children with stereotypic role concepts). Since models of both sexes are "plentifully available" to children, a potentially broad behavioral repertoire could be learned through modeling.

If it can be proven that children show distinct and clear resemblances to the same-sex parent, it could be inferred that the child imitated that parent. By looking at qualities such as speech inflections--which are rarely reinforced by parents--we can examine the effect of imitation on behavioral acquisition. If resemblances are weak or absent, the effect of modeling in sex-typed behavior acquisition is questionable. Studies by Lazowick (1955), using the semantic differential, Hetherington (1965), and Mussen and Rutherford (1963), studying femininity of girls related to their mothers and boys' masculinity to their fathers, discovered <u>little or no consistent similarities</u>.

Studies involving direct observations of children in the presence of adult same-sex and cross-sex models also showed no significant interactions between the sex of the child and sex of the model in similarities of behaviors (Hetherington 1965; Bandura and Kupers, 1964).

It seems that modeling is a crucial process in the acquisition of behavioral repertoires, but this repertoire is not sex-typed and "Knowledge of what behavior is appropriate is crucial in the selection of what items will be used in performance (by the child) out of the repertoire of potential actions" (Maccoby and Jacklin, p. 301). For these reasons, the cognitive-developmental theory of sex-role learning seems to be an adequate and appropriate explanation. However, it is possible that a child may choose to attend selectively to same-sex models, which would result in a sex-typed behavioral repertoire. Modeling of figures who appear dominant, powerful, and nurturant to children seems to be the critical factor in this aspect of the socialization process.

D. <u>Teachers and parents have differentiated ideas of what a typical "boy" and "girl" possess in abilities, qualities, and personalities that perpetuate an "unconscious sexism." Yet how they perceive that boys and girls "should" behave and perform is not stereotyped</u>.

<u>Implications</u>: Primarily, teachers and parents must become aware of their "unconscious sexism"--what it is composed of, its origins, and its perpetuators in their own lives--and the effects of these attitudes on their behavior toward children. It seems that many acknowledge the need to change these attitudes and

must be encouraged to effect these changes through exposure to interventions, change process, and peer support groups. It must be communicated that stereotyped sex-role attitudes and behaviors are malleable and can be changed by using appropriate strategies.

> Boys and girls are more alike than different, both biologically and culturally--there is more variation within than between sexes. Where sex differences exist, they are mostly behavioral and/or situational in nature, stemming from societal expectations, previous reinforcement and habit (Lee and Gropper, p. 401).

Since it is the stated goal of most teachers, parents and educational institutions to promote development of children's human potentials, they do not "consciously" limit the options, attitudes and behaviors on the basis of sex. Donovan (1973) surveyed a wide variety of teachers in different school systems and found they reported no difference in feelings or behaviors toward boys and girls. Classroom observations, however, revealed clear differences in teacher-student interactions on the basis of sex of the child. As Guttentag and Bray assert, this is indicative of the existence of an "unconscious sexism":

> Unspoken beliefs about sex differences in boys and girls, their future occupational roles, and different parental expectations for the children seem to influence the dynamic interactions between teachers and students, although teachers may not be consciously aware of it (p. 18).

Ricks and Pyke (1973) interviewed 30 male and 30 female teachers and found that 73 percent of the teachers reported that boys and girls behave differently while 55 percent of the female teachers and 50 percent of the males thought that boys and girls expected differential treatment. The same percentage viewed teachers as neither having the responsibility nor the right to influence children's sex-role attitudes. The remaining percentage felt modeling in a non-sexist manner would change children's attitudes. Lee (1973), Feshbach (1969), and Levitin and Chananie (1972) have further substantiated that elementary school teachers have well-defined sex-role expectations and perceptions along "traditional" masculine and feminine role definitions.

Parents, too, have been found to possess stereotypic expectations and attitudes about their children. Lambert, Yackley, and Hein (1971) found that parents described boys as being more likely to be rough at play, be noisy, be competitive, be physically active, defy punishment, and enjoy mechanical things. Girls were seen as helpful around the house, neat and clean, quiet and reserved, sensitive to others' feelings, easily crying, and easily frightened. Yet when asked what it was important for boys and girls to be like, little sex differentiation existed in characteristics prescribed for either sex. Similar results were obtained by Smith (1971), working with 48 pairs of American black parents. Levitin and Chananie (1972), studying first and second grade teachers, reached similar conclusions. Aggressive behavior was more often thought to be typical of boys, but it was disapproved equally for both sexes. Dependent behavior was asserted not to be desirable in either sex.

In sum, what we see is a picture of a fairly clear differentiation between parent and teacher goals, perceptions, and behavior, and their effects on children. The first step is for educators and parents to become aware of their "unconscious sexism" in attitudes, perceptions, and behaviors. Once this is accomplished, effective strategies must be identified to help change the attitudes and behaviors that limit career development, and support groups must be developed to assure that the interventions can be successful.

E. Teachers engage in a variety of behaviors that are sex-differentiated.

1. Boys may receive more intensely directive interactions (more specific critiques) from teachers, while girls may receive more generalized responses (nonspecific approval), attention, and verbal interactions.

Implications: This sex difference in interactions would enable boys to develop more independent attitudes and internal locus of control than girls. Specific feedback on their behaviors will enable children to more accurately judge their behaviors in relation to others. In addition, since independence correlates highly with creativity, girls develop a disadvantage in their motivation to achieve or perform in activities where creativity and independence are needed.

2. Teachers expect and reinforce females for passive-dependent behaviors. Passive-dependent males are not well-liked or reinforced. A policy appears to exist in schools of training boys for independent behaviors and girls for traditional, dependent, socially approved behavior.

Implications: Teacher expectations and behaviors serve to perpetuate traditional male/female stereotypes: boys as aggressive and independent, girls as passive and dependent. The long-range consequences of these procedures are evident: Due to this early training and later behaviors in a similar mode, girls and boys will likely choose stereotypic career options based on sex--not on their human potential and interests.

3. Teachers seem to know more about individual boys and their abilities, qualities, and personalities than they do about girls. In addition, more teachers seem to prefer male students at the elementary level.

Implications: This hypothesis also points out the need for teachers to become aware of how their attitudes and behaviors toward children are sex-differentiated. Educators must get "in touch" with those feelings, their origins, and perpetuators in order to effectively change and/or modify them.

To investigate teachers' sex-role perceptions and attitudes, researchers often have presented teachers with hypothetical cases and asked them to rate and describe their feelings about them. Levitin and Chananie (1972), utilizing this technique, discovered that dependent females received more approval than dependent males, and dependent girls and aggressive boys were characterized as typical for their sex. Dependent males were liked less than achieving females and dependent females. What these data present is a picture that dependent girls are well liked and reinforced for these behaviors, while dependent boys are disliked and "motivated" by teachers to change and modify dependent

behaviors (Martin, 1972). Levitin et al. also assert that "both direct and indirect expectations and approval are communicated to the dependent girls" (Guttentag and Bray, p. 20). Guttentag and Bray (1976) make an excellent summary of the possible long-term effects of these behavioral contingencies, especially since it has been found that independence correlates highly with creativity:

> Yet it is independence, not dependence, which later correlates with creative intellectual ability. Girls who are trained to be dependent grow up to be dependent women who may demonstrate knowledge on tests of achievement, but are seldom the innovators and reformers of ideas or systems. Boys who are pressured out of dependence may grow up to be the thinkers of original thoughts and problem solvers in our society (p. 20).

Studies on classroom interactions and discipline also reveal a variety of behaviors that are sex differentiated. Meyer and Thompson (1956) found that boys received significantly more disapproval contacts with teachers than girls in sixth grade classes that were studied. Trends also pointed to boys receiving more praise. Similar results were revealed in a work by Jackson and Lahaderne (1967), where sixth grade boys were found to have more prohibitory, instructional, and managerial contacts with teachers than girls. Cherry (1975), investigating verbal interactions at the preschool level, found that boys had more verbal interactions with teachers and that teachers were more likely to initiate those interactions with boys.

Teacher reactions towards disruptive and dependent student behaviors were examined for sex differences at the preschool level (Serbin, O'Leary, Kent and Tonick, 1973). Observations revealed that teachers reacted in a stronger and louder manner when dealing with boys' aggressive behavior than with girls'. Do teachers believe boys cause more trouble and need forceful, immediate attention? Do boys need to be yelled at to obtain desired responses? These motivations need to be examined. A critical finding was revealed when the distance from teacher to student was measured. Boys and girls receive equal attention only when they are both close to the teacher. When boys are out of the immediate area of the teacher, they still manage to receive teacher attention while girls need to be near the teacher to receive the same. This behavior may indirectly train boys for independent behaviors and girls for dependency:

> Boys who are appropriately at work in the classroom out of the teacher's reach still receive encouragement and attention from the teacher, supporting their adventurous and independent activities. This is a subtle yet powerful form of differential treatment by teachers. It supports a policy of training boys for independent behaviors and girls for socially approved behaviors (Guttentag and Bray, p. 21).

Guttentag and Bray (1976) also assert that boys receive more intensely directive interactions from teachers than girls do; that is, more punishment and praise as well. Girls receive more generalized approval, they state, while boys get more specific behavioral critiques (p. 21).

Studies have also shown that teachers seem to know more about the abilities and qualities of boys in their classrooms than girls. Jackson (1968), Jackson and Getzels (1959), and Jackson and Lahaderne (1967) discovered that teachers were better able to differentiate boys in terms of satisfaction with school than girls. Statements about class members were indicative of more personal involvement, analysis, and accuracy with boys by teachers.

In addition, one study (Ricks and Pyke, 1973) indicated that more teachers, especially females, preferred male students to females. Boys were characterized as being more outspoken, active, willing to exchange ideas, open, honest, and easier to talk with. These beliefs must definitely affect the teacher-student interaction and future implications for pupil growth and development.

Guttentag and Bray have made an excellent summary of the sex-differentiated classroom interactions and their far-reaching effects:

> If teachers tend to initiate more contact with boys and give them more evaluative feedback on their performance, this will help boys to realistically evaluate their own efforts and will help to lay the groundwork for independent intellectual activity. In contrast, if girls are given more global feedback, they will not be able to evaluate their own performance realistically or feel confident about doing things on their own (p. 22).

F. Certain biological differences seem to exist between boys and girls at the elementary level. One critical consideration is that girls enter into first grade at a higher level of physiological development--usually around twelve months--than do boys. This may account for the appearance of increased verbal facility and social development of girls at the elementary level due to their accelerated physical maturity. Boys have also been found to be more aggressive at these ages than girls.

Implications: Teachers, parents, and children should be made aware of the physiological differences between the sexes at the elementary years and be educated about the development of these differences as they grow. This is critical in order to differentiate behavioral sex differences that have their basis in physiology or socialization.

Are the sex differences observed in children at the elementary level the result of physiological differences or environmental socialization? This is a critical consideration in this review of studies in that differentiations based oh physiology would limit any attempts to modify and/or change present conditions. Clearly it is important to try to ascertain which sex differences are genetic and which ones culturally determined. Reviews of studies by Maccoby and Jacklin (1974) and Lee and Gropper (1974) reveal that the major differences exist in the areas of physiological development and aggression.

When children enter into first grade, girls have about a twelve-month lead over boys in physiological maturation (Lee and Gropper, p. 380). This difference may be manifest in the level of verbal ability, where it is found "that girls' verbal abilities mature somewhat more rapidly in early life" (Maccoby and Jacklin, p. 351), and social development. Bentzen (1966) found that for every three boys referred for learning problems, one girl was referred. Boys were referred for social and emotional immaturity eleven more times than girls.

Citing various empirical and biological studies, Maccoby and Jacklin have fairly well established that "boys are more aggressive both physically and verbally" than girls across all cultures (p. 352). Hypothesizing hormonal differences as a causal base, they identify these differences as early as social play begins at 2 or 2 1/2. In all instances--mock fighting, aggressive fantasies, and direct displays of aggression--boys were found to be more aggressive than girls (p. 352).

While parents and teachers need to understand that physiological sex differences in maturation and aggression appear to have been established, perhaps it is even more important that they be aware of how their own behavior and attitudes toward boys and girls may be affected by such knowledge. The relevance of these differences to the range of career options and choices available to girls and boys still needs to be investigated.

G. Male/female team teaching could be effective in reducing sex-role stereotyping of children at the elementary level.

Implications: The main concern of this generalization is that the presence of male and female teachers will provide children with equal access to teachers' modeling value so the children may selectively attend to each sex. Apart, male and female teachers do little to reduce sex-role stereotyping. When the two are together in the same class, their effects seem to complement each other in a positive way.

Following logically from the section on modeling, it seems that male/female teams could be effective in reducing sex-role stereotyping for the reason that it broadens the possible repertoire of behaviors children will learn through modeling. In the present school structure, children are forced to "selectively attend" to female models in the elementary school, thus limiting the number and kinds of behaviors they can model. Although there is little research in the area of the effects of male teachers on children, this would probably also limit the modeling potential for the children in the same manner.

Research points to the positive effects of male/female team teaching on all students. Good, Sikes, and Brophy (1973) found that there is little difference between seventh and eighth grade teachers in terms of how they related to male and female students, although they tended to complement each other in some aspects of this interaction. Lee and Wolinsky (1973) concluded that the contribution of both sexes to children in the early grades was complementary rather than contradictory in terms of relating to children. Also, in a study by Mueller and Cooper (unpublished, 1972) of preschool team teaching, the discovery was made that this process increased cross-sex area usage and social interactions of children of the opposite sex.

In summary, the indications are optimistic concerning the effects of male/female teams on children in the classroom:

> It may be that the combination of male and female teachers would be optimal for young children, especially if the two modeling possibilities were provided...Our contention is that the presence of male and female teachers would provide children with equal access to the teacher's modeling value (Lee and Gropper, p. 394).

Early exposure to both sex models in the schools could have beneficial effects on both boys and girls in their human development.

## Influence of the Media as a Socialization Force

In recent years, the role of the media as a socialization force has come under great scrutiny. This has been especially true in the area of sex-role stereotyping, where children's television, literature, and movies have been identified as causing/catalyzing the sex-biased attitudes of many people. Is there any truth to these claims? Do the media indeed present their characters in stereotypic male/female roles? These are some of the questions that we will consider in this section. We will focus on the literature and television media in this review. Although a complete review of sex-role images in children's literature is outside the scope of this paper and has been done elsewhere (Hochschild, 1973; Weitzman, Eifler, Hokada, and Ross, 1972; Women on Words and Images, 1975), the importance of the portrayal of males and females in children's readers, picture books, and stories must be acknowledged as part of the stereotyping problem. For a more thorough discussion, readers are referred to these studies.

## Literature Influence

As previously mentioned, the role of children's literature in contributing to stereotypic images of males and females has been the subject of many investigations. Although most of these studies were done independently, they reveal strikingly similar conclusions: children's literature does present stereotypic views of males, females and their relationships.

Anthropologist John Honingmann, in Personality in Culture (1967), made one of the earliest statements concerning sex bias in American children's books:

> Reflecting a poorly concealed bias in American society, central characters in the stories are male more than twice as often as they are female. Surely this confirms the readers' belief that one sex is more important than the other, even if that isn't the only way [s/he] finds out. Stories frequently differentiate male and female roles, just as our culture does. They generally leave female characters to display affiliation and nurturance and to flee danger; rarely do girls display traits of activity, aggression, achievement, or construction; seldom do they win recognition. In other words, girls are pictured as kind, timid, inactive, unambitious, and uncreative. Furthermore, characters in the story who are nurtured by a central character are mostly female, suggesting that femals are likely to be in a helpless position... School readers portray males as bearers of knowledge and wisdom, and also as the person through whom knowledge reaches a child (pp. 203-4).

As Honingmann so clearly points out, children's literature generally portrays females in a stereotypic, traditional manner. What is not as obvious are the limitations that are also thrust upon the male role: males displaying affiliation, nurturance, timidity and lack of "ambition" are also sorely lacking in children's books.

Elementary textbooks often are the focus of investigators (see Dick and Jane as Victims: Sex Stereotyping in Children's Readers, Women on Words and Images, 1975) but other literature for children is often as stereotyped. The books receiving the most prestigious accolades in children's literature, the Caldecott Awards and the John Newbery Awards (presented annually by the Children's Service Committee of the American Library Association), were recently investigated (Key, 1975). The Caldecott seal is awarded for an outstanding contribution to children's literature. In eighty Caldecott winners examined, there were three times as many male names in the titles as female names. Only one-fourth of the characters present in the books were female. The Newbery awards also proved to be limited in their presentation of female characters, with males outnumbering females three to one in stories (p. 64). Overall, the status of male/female presentations in children's literature was best summarized by the character in one Newbery award winner: "Accept the fact that this is a man's world and learn how to play the game gracefully" (p. 64).

Many of the children's textbooks and reading literature are stereotypic in their presentations, and may have adverse effects on children, due to modeling and selective attention to stereotypic male/female roles. Many resources, however (e.g., Guidelines for Equal Treatment of the Sexes in McGraw-Hill Book Company Publications, McGraw-Hill, 1976), provide guidelines for analyzing children's books for aspects of sex-role stereotyping. Others are helpful in identifying alternative children's works where characters are seen as non-stereotypic human beings (A Guide to Non-Sexist Children's Books, Adell and Dole-Klein, 1976). Educators have begun to increase their awareness of this particular problem and to sensitize their students and peers to the possible effects on children's expectations and options.

## Television Influence

The Nielsen survey indicates preschool children watch an average of 54 hours of television a week. School-age children spend more hours watching television than they do attending school (Ellis, 1976). What are they watching? What are the sex-role influencers present in this medium? Does television watching facilitate stronger traditional sex-role development for boy and girls?

A comparison study by Sternglanz and Serbin (1974) analyzed the ten most popular commercially produced children's television programs for treatment of females and males. Commercial television was chosen as the focus of the study as it is the most watched by school-age children. Four of five female leads in the chosen programs were some kind of witch who relied on magic to get what she wanted or to get out of trouble. Striking differences in the treatment of the sexes were found. In the total sample there were twice as many male roles as female roles. In addition, behavior was also different: male behavior was more often portrayed as aggressive and constructive (e.g., building, planning) than female behavior. Females were more likely to be shown as deferent to male characters. Males were more often rewarded while females more often received no consequences for their behavior. With the exception that females were often punished for high levels of activity than were males, these findings on differential rewards and punishments of the two sexes are consistent with findings in books, classroom observations, and home environment studies (Serbin, O'Leary, Kent, and Tonick, 1973).

Public television's popular offering "Sesame Street" has come under study. "Sesame Street" is one of the most progressive, educational and popular children's programs on television today. Children are learning basic skills by watching the program and emulating the characters. Most viewers, especially young children who tend to learn by imitation rather than analysis, may accept its portrayal of males and females as representative of desirable roles.

Gardner (1970) examined various "Sesame Street" programs and discovered stereotypic presentations of males and females. Sex-role stereotyping in social and nature studies sections she judged as being extreme. Concern was felt over repeated emphasis that there is "men's work," heavy, important work outside the home, and "women's work," arranging flowers, decorating, and mothering. While some of these have been corrected in recent programs, subtle biases still exist.

It seems clear that the children's literature and television media are overwhelmingly stereotypic in their presentation of male and female roles. Other aspects of American culture (advertising, marketing, magazines, movies, etc.) also reflect this sex bias. BORN FREE, a project working primarily with educational institutions to reduce sex-role stereotyping, needs to incorporate concerns about the effects of the media into its action programs for both educators and parents. One major program devoted to using television in counteracting stereotyping is described in the intervention section which follows.

## PART IV: SELECTED INTERVENTIONS AND RESOURCES

Having examined the nature of the problem of career-related sex-role stereotyping in the elementary school, as well as critical variables in the early career socialization process, it is important to turn to questions of what can be done to reduce the barriers to growth and development produced by such stereotyping. The theoretical and conceptual frameworks were described earlier; a few practical programs and strategies for intervening in the elementary school are described below.

This section on interventions may be the most critical of any areas dealt with in this review in that it provides some ideas and frameworks for actually "doing something" about career development at the elementary level. It will be presented in two parts. First, two Generalizations and Implications will be introduced as specific considerations in the reduction of sex-role stereotyping in career development programs. Second, reports of the methods and effects of some of the sparse interventions already attempted in this area will be made. Although there have been hundreds of career education interventions in elementary schools throughout the country, since many of them have not dealt with sex-role stereotyping and have not been evaluated (McLaughlin, 1975), they are not included as part of this review.

### Selected Interventions

A. <u>There is a differentiation between what occupations children view men and women as being capable of doing and what they themselves choose for occupations.</u>

<u>Implications</u>: Besides presenting children with the broad possibilities for them in occupations and trying to prevent premature foreclosure, career development interventions at this level should emphasize development of the <u>individual</u> child's abilities, interests, values, self-concept, and decision making. In short, development of a "sense of agency," or self-direction, should be stressed. The child should feel in control and confident about his/her individual life decisions.

This generalization is a critical consideration in developing intervention procedures, and it has an established empirical base. Bacon and Lerner (1975), while studying girls in grades 2, 4, and 6, discovered that as their grade level increased they more frequently saw women as possible entrants into male-dominant vocations. However, females at <u>all</u> grade levels aspired to and anticipated that they would engage in traditional female roles.

Congruent with Bacon and Lerner (1975), Schlossberg and Goodman (1972) found that while children at kindergarten and sixth grade levels believed men or women <u>could</u> do any occupation (men or women could be doctors or nurses), they chose occupations for themselves congruent with prevailing stereotypes (boys all chose doctor and girls chose nurse).

Reducing Sex Roles

Reporting on the effects of career development interventions directly designed to make students aware of sex-role stereotyping, Parks (1976) found that children in grades 3, 4, and 5 reduced their sex-role stereotyping of career roles of men and women. Just as in previous studies, however, boys and girls still chose sex-typed careers. Overall, the reduction in bias did not influence individual career choices. These findings led Parks to hypothesize that individual occupational choice may not be a direct result of career awareness or sex-typing tendencies. Occupational selection, it was asserted, may be motivated more by socioeconomic status, parental influence, and/or peer relations. Whatever factors influence individual choice, helping a child develop a "sense of agency" may do more to prevent premature foreclosure than any other strategy. By helping children objectively consider their own abilities, interests, and values, teachers may help them become truly born free.

B. A "critical period" for the effectiveness of career development interventions seems to exist at the elementary level.

Implications: Career development interventions must be matched to the developmental level and cognitive stages of children, along with individualized career needs of children; this should be a major consideration in program implementation.

Of all of the generalizations advanced, this is the one with the smallest empirical basis, due to the few program evaluations done in this area. A few sample programs are described.

Parks' (1976) intervention deals with this area. The purpose of the study was to discern the following: (1) Does exposure to a career-oriented curriculum increase the career awareness of elementary school children? (2) Do children in grades 3, 4, and 5 demonstrate less sex bias after exposure to such a curriculum? and (3) What effect does this career development curriculum have on the children's choice of occupation? Children at grades 3, 4, and 5 were given a pre- and post-career-role identification inventory to ascertain which occupations they saw as possible for men, for women, or for men and women. Individual career aspirations were also measured. These children were then exposed to a "career-oriented" curriculum, a program that was integrated into language arts and social studies for a minimum of eight total hours. Four objectives of the intervention were to: (1) expose the children to a broad range of occupations, (2) encourage each pupil to think about these occupations in relation to their abilities, interests, and aspirations, (3) expose children to various career education activities speakers, study of community, meaning of work, and (4) increase children's awareness of sex stereotyping. Post-testing revealed that the level of career awareness increased as grade level increased, but grade 4 showed the only significant gain as the result of exposure to the curriculum. The intervention was effective in reducing sex stereotyping in grades four and five, but in grade three boys and girls chose occupations that were congruent with prevailing sex stereotyping. Check Generalization I in this section for commentary on how this reduction in sex bias did not influence expressed individual occupational choice.

The fact that this intervention was only successful in grades 4 and 5 led Parks to hypothesize that a "critical period" exists for the effectiveness in

implementation: "This study suggests that career awareness and career role activities should be introduced sometime during grade 4" (p. 473). It is of interest to note that the transition from third to fourth grade marks the differentiation between Gysbers' (1969) stages of perceptualization-conceptualization, that is, the point where children begin to conceptualize about the way they differ from others instead of just being aware that these differences exist. Interventions at K-3 levels should differ from ones used in 4-6 levels, corresponding to the developmental levels of the children involved.

Career Education and Self-Concept

Highlighting the importance of development of self-concept to prevent occupational foreclosure, Matthews (1975) has adapted the work of Super in emphasizing the need for career development programs in the elementary school. She urges educators to "recognize that the roots of later occupational choice(s) lie in the early years of life" (p. 23). Active interventions to stimulate the development of individual children are needed in early school years.

> In order to avoid or prevent premature closure or narrowing of choice, we need not lose sight of individual directions and tendencies that may never materialize without recognition, support and nurturance (p. 28).

Super has asserted that a child's self-concept formation begins in the elementary years and continues through the course of a child's life. Adequate development of the self-concept can "radically optimize the human development of children" (p. 29).

Career development programs can successfully facilitate self-concept development. Activities emphasizing exploration, self-differentiation, identification, role playing, and reality testing should be utilized because they provide:

> ...appropriate opportunities for choice instead of continual direction; for independence rather than dependence; for inner self-direction in contrast to external direction; for decision making rather than domination (p. 30).

Matthews identified a four-question framework as a base for elementary school career guidance, especially facilitative due to its open-endedness and potential for creativity: (1) What am I like? (2) How am I changing? (3) What will I be like? and (4) How will I affect others and how will they affect me? Self-concept development activities are to be placed within this framework.

Matthews also highlighted the importance of diagnosing the individual needs of children rather than imposing a program that mandates use of "mechanical, pre-determined activities placed onto children (for their own good!)" (p. 33). Recognition of the individual needs and differences of children will result in a program that results in optimal effectiveness through use of appropriate strategies.

## Group Counseling

Harris (1974) studied the effect of group counseling for increasing the number of tentative career choices and decreasing the number of sex-typed occupational choices among middle-class sixth grade girls. After the group met for six 30-minute sessions, composed of role playing, discussions, and exercises, they were compared with a control group (who did regular class work). Pre- and post-testing showed that (1) there were no pre-test differences between the groups on tentative occupational choices or sex-typing, and (2) after counseling, experimental subjects had significantly more tentative occupational choices and fewer, although not significantly, sex-typed choices. It appears that group counseling may be an effective means for career development interventions to reduce stereotyping, especially with its capabilities for more individualized attention than on the classroom level.

## Changing Sex-Role Stereotypes through Career Education

In the intervention most pertinent to this subject, Kalunian, Lopitich, and Cymerman (1975) have identified a three-step process to reduce sex-role stereotyping in career education in elementary school: (1) Increase self-awareness, (2) recondition role perceptions, and (3) develop new attitudes.

The awareness dimension should emphasize accurate perceptions of self and others and development of self-concept. By helping children recognize, express, and understand their feelings and those of others, self- and interpersonal awareness can be facilitated. By analyzing individual similarities and differences, the concepts of the work world and sex roles can be introduced.

Kalunian views "role reconditioning" as comprising "sensitization" and "desensitization" procedures for preparing children for new roles. In restructuring these role perceptions, making children aware of the effects of stereotyping would be an effective technique to promote children's awareness of the long-range effect of these attitudes. Examples and models presented would be useful in increasing the options and alternatives children view as possible for themselves. Then, when trying to develop new attitudes, children should be made aware of how their individual attitudes will affect their own decisions and the larger social scheme.

Three concrete activities were suggested by Kalunian to achieve goals of the intervention: (1) a systems analysis, (2) group discussions with girls and boys on sex differences, and (3) creation of a "perfect person"--qualities at work and similarities and differences between the "perfect person," self, and others.

## Using Television to Mediate the Effects of Sex Stereotyping

A major project is under development to use television as a means to promote sex-fair career development in children. Funded by the National Institute of Education for 3.5 million dollars, the Television Career Awareness Project (TV-CAP) has potential for great impact on children directly. Directed by Norton Wright, the project is only in a development stage with several half-hour pilot

films being tested. Ultimately 26 films for elementary children (9-12 years old) will be produced and broadcast on public television. The project has a careful evaluation design. It has been subtitled "Freestyle."

Project staff have identified nine instructional objectives which provide the framework for development:

1. Androgynous Behavior
2. Non-Traditional Activities
3. Limitations of Stereotyping
4. Risk Taking
5. Cinderella Myth
6. Leadership Roles For Females
7. Luck
8. Independence, Initiative, Self-Directedness
9. Nurturing Males

## Selected Resources

In the last few years there has been a burgeoning of materials related to sex-role stereotyping in the schools. Several professional associations such as the National Education Association and the American Personnel and Guidance Association, as well as specific subject areas, have sponsored workshops, published practical materials and bibliographies, and in various ways urged members to increase their awareness of their own stereotyping and do something about it. Many of the materials prepared recently as part of career education programs have been criticized as perpetuating a lot of stereotypes. That such stereotyping exists in career education materials has been confirmed by studies done in the U.S. Office of Education and the National Institute of Education. In fact, testimony presented on the Elementary and Secondary Career Education Act of 1977 (H.R. 7) reflected strong concern about sex-role stereotyping in career education programs. Recent legislation such as the Education Amendments of 1976, especially the Vocational Education and Career Education sections, gives major emphasis to problems of sex-role stereotyping in the schools. The Women's Educational Equity Act Program (1976) in its first year sponsored 67 national programs (of which BORN FREE is one) to reduce sex-role stereotyping. Many materials being developed by these projects should be available to educators, parents and others who wish to work on these problems. These legislative mandates and professional efforts provide excellent support as well as useful resources for reducing sex-role stereotyping in the schools.

The following section briefly describes a few selected articles and projects that may be useful in designing programs to deal with sex-role stereotyping in career development. For each source, a brief summary has been provided, along with sections noted that are of particular relevance and importance to the goals of Project BORN FREE.

Resource Book of Low-Cost Materials for Career Education. Eagan (1974)

Developed in accordance with the American Institutes for Research (AIR) Career Education Curriculum Department, the annotated bibliography of low-cost materials is a good resource for implementing career education in the schools. These materials are an excellent way to familiarize elementary teachers with career education at this level. A comprehensive review of children's literature related to career education concepts is also well done. The section on sex stereotyping and career education would be an excellent introduction for teachers to this area of concern.

Parents and Young People. National Organization for Women (1974)

This is one of the best resources to be produced in the area of sex equality in educational institutions. The focus of the work was to provide materials and increase parent and teacher awareness of sexism and to provide ideas and programs for helping people to overcome sexism in the schools. Questionnaires, teaching strategies, activities, lesson plans, and classroom materials are well formulated and presented. Media resources are highlighted along with numerous bibliographic resources. Sections most related to sexism in career development include the following: (1) faculty questionnaire on sexism (p. 3); (2) dealing with sexist classroom materials as a teacher (p. 5); (3) activities that increase children's awareness of sexism (p. 7); (4) secondary school activities (p. 12); (5) media resources for adolescents (p. 20); (6) elementary level media (p. 21); and (7) filmstrips that are applicable to different levels of instruction (p. 22).

Education for Survival: Sex-Role Stereotypes Project, Final Report. National Education Association (1973)

This report summarizes one year's activities to examine stereotypes in elementary and secondary education. Investigating how sex-role stereotypes are manifest in the schools, it focuses on involving organizations and individuals now concerned about this area. The most outstanding portions deal with sex-role socialization, teacher behaviors that facilitate and perpetuate sexism, and the effects of the media on stereotyping. Information on change process (p. 20) and teacher awareness of sexism (p. 23) should be especially beneficial to the reader. A kit now available on sex-role stereotyping is one of the major products of the project.

Sexism in the Schools: A Handbook for Action. Rothchild (1973)

This resource was designed for those aware of and concerned with sex bias in public schools in the areas of (1) athletic budget, (2) sex stereotyping in children's books, (3) differential expectations in classroom behavior, (4) counseling attitudes and practices (5) school personnel assignments, and (6) the impact of stereotyping in the school on children. Listings of resources and materials are included.

Influences on the Career Development of Elementary School Children. Ryan and Young (1973)

This study was an attempt to measure the effect of reading materials on the career awareness of elementary school children. It was found that reading materials had little effect on children's view of occupations. The summary, conclusion, and recommendations from the study are the most pertinent to sex-role stereotyping. In addition, an excellent career inventory for the elementary grades is included (pp. 49-51).

Reading Innovations: Practical Suggestions for Teaching and Humanizing Procedures. Smith (1975)

This paper discusses innovations in reading and suggests methods to begin "humanizing" this teaching process. Sections are presented on sex equality, sex differences in school staffing, sex roles depicted in reading materials, and advances in human relations that pertain to sex equality in schools. A definition of "career education" and examples of career awareness in elementary and secondary schools are also included.

And Jill Came Tumbling After: Sexism in American Education. Stacey, Bereaud, and Daniels, Eds. (1974)

This work contains many comprehensive essays on how school processes encourage sex bias and foster sex-role stereotyping. Focusing on levels kindergarten through high school, this is an excellent collection for those interested in facilitating the goals of Project BORN FREE.

Math and Sex. Ernest (1976)

An excellent essay dealing with how the sex-appropriateness of a subject area, as perceived by students, can affect aspirations and achievement in that subject. Here, the focus is on how sex stereotyping directs girls and women out of mathematical areas. The implications for women's careers in the sciences, engineering, and other related fields are explored.

Sexism and Youth. Gersoni-Stavn, Ed. (1974)

This anthology, edited by Diane Gersoni-Stavn, covers a wide range of concerns in the area of sex-role stereotyping: socialization, school influencers, and "indoctrination." Media, toys, and games are also examined for indicators of sex bias. Along with many new pieces on this topic, some classics in the area of sex-role stereotyping are included. Excellent collection.

Unlearning the Lie: Sexism in School. Harrison (1973)

Essentially an anecdotal account of the joys, troubles, and trials of a private school attempting to deal with sex-role and racial problems. Set in Brooklyn, New York, the work concentrates on human relations activities between the sexes, races, parents, and teachers. Very useful for those wishing to analyze the implications of attempted change in educational institutions, particularly focusing on ethnic minorities.

Dick and Jane as Victims: Sex Stereotyping in Children's Readers. Women on Words and Images (1975)

Important resource for anyone interested in analysis of elementary school readers for aspects of sex-role stereotyping. Women on Words and Images have comprehensively analyzed readers from fourteen major publishers and discovered varying but strong evidence of sex bias in these educational materials.

Guidelines for Equal Treatment of the Sexes in McGraw-Hill Book Company Publications. McGraw-Hill Book Co. (1976)

Stressing the harmful stereotyping of females and males, this publishing house has developed some detailed guidelines and rules for avoiding sex bias. Its analysis of sex-biased language and unbiased alternatives deserves special attention for those interested in facilitating the goals of Project BORN FREE.

Undoing Sex Stereotypes. Guttentag and Bray (1976)

Making one of the best resources in the field today, Guttentag and Bray have effectively combined a literature review, intervention strategies, anecdotal accounts, and a comprehensive resource listing. This was a required textbook for participants in the BORN FREE Summer Institute and most agreed on the work's excellence. The literature review, although not extensive in its scope, summarizes research findings and cites implications most relevant to teachers in the area of sex-role stereotyping. Intervention strategies are practical and focus upon classroom usage. Intervention strategies are practical and focus upon classroom usage. Anecdotal accounts of actual intervention experiences provide a "real-life" perspective of their application. In addition, a huge resource list is provided for materials usable for classroom and teacher benefit. This book is a critical addition for those even remotely concerned with Project BORN FREE methods and goals.

bread and butterflies. Agency for Instructional Television (AIT, 1974)

This is a media-based resource of 15 films on career development for 9-12-year-olds, combined with a teacher's curriculum guide. The Agency for Instructional Television (Bloomington, Indiana) created the films and instructional materials through a consortium of states dedicated to improving program and materials in career education. This set of materials is based on the Minnesota CDC curriculum model and indicates awareness of sex-role issues. A student guide and workbook, my bread and butterflies career book, also has been published.

## PART V: SUMMARY

In this final section of the review, a summary of research generalizations will be presented with appropriate references noted. The organization for the section will directly follow that of the review:

### A. Problem Identification

#### Empirical Findings

##### Sex-Role Learning and Occupational Stereotyping

It is clear from the literature that sex-role learning and occupational stereotyping occur at an early age in a child's development. Many studies have cited the appearance of sex-role identification by the ages of three or four (Fauls and Smith, 1956; Hartup and Zook, 1960). Sex-typing of activities also occurs at this age (Sears, Rau, and Alpert, 1965).

Children in elementary school have been found to be traditionally stereotyped in their occupational aspirations and attitudes by first grade (Looft, 1971; Siegel, 1973; Schlossberg and Goodman, 1972; Parks, 1976). In addition, it was discovered that boys see more occupational areas as possible for them, and over a broader range of fields, than do girls at the elementary level (Siegel, 1973; Schlossberg and Goodman, 1972; Iglitzin, 1972).

### B. Theoretical and Psychological Frameworks

#### Career Development Conceptual Framework

This framework, created by Tennyson, Hansen, Klaurens, and Antholz (1975), has formed the conceptual base for the development of materials for Project BORN FREE. Drawing from the developmental theorists, the CDC has defined critical developmental tasks for the primary and intermediate levels. These developmental tasks have formed the basis for many learning strategies in the area of career development.

#### Tuckman's Age-Graded Model for Career Development Education

Another conceptual model which draws on developmental theory is that of Tuckman (1974). Tuckman divided career development strategies in elementary school into five levels and provided rationales and activities for an effective career development program. This is an additional perspective for career development education and should be combined with individual needs, goals, and objectives to formulate effective methodologies.

#### Gysbers's Model for Promoting Career Development in Elementary School

One of the earliest developmental statements was that of Gysbers (1969), whose framework is of value in relating career development programs to three phases a learner goes through during schooling: perceptualization, conceptualization, and generalization. The main emphasis in this model is to prevent

elementary children from making premature decisions about educational and occupational possibilities. His more recent formulation of the career-conscious individual and the implementation guide appear in several publications (Gysbers and Moore, 1974).

### Personality Variables

While literature reviewed in this area was not always concrete and unequivocal in its findings, several generalizations were made from past research. Dealing with the area of self-concept, numerous studies show a strong trend toward no sex differences on this variable at the elementary level (Long, Henderson, and Ziller, 1967; Lekarczyk and Hill, 1969; Goldschmid, 1968). Need for achievement studies have revealed no sex differences with elementary children (Masters and Christy, 1973). Other variables such as locus of control (Crandall and Lacey, 1972; Walls and Cox, 1971) and risktaking (Slovic, 1966; Kopfstein, 1973) also revealed no sex differences at the elementary level.

Some differences in personality variables were discovered: Boys have been found to have a higher expectancy of success on tasks (confidence) than do girls (Crandall, 1969; Montanelli and Hill, 1969). In a critical finding, it was seen that perception of subject areas, with regard to sex-appropriateness of these areas, will affect children's achievement in these areas. A child's need achievement, attainment value, and expectancy of success are influenced by the perceived sex-appropriateness of the task (Dwyer, 1974; Stein et al., 1971).

## C. Problem Causation and the Socialization Process

### Theories of Socialization

In this section, summaries of the psychoanalytic, social-learning, and cognitive-developmental models were presented. Each model pinpointed a critical process in socialization: modeling (psychoanalytic), differential reinforcements, and the child's concept of what is "masculine" or "feminine" compared with how s/he fits according to this perception of an appropriate role.

### Socialization Process

#### Differential Reinforcement

Some differential reinforcement by parents does seem to exist with regard to a child's sex. Girls have greater latitude in their actions (can do "male" and "female" activities; "tomboy" is permissible) than boys (can do only "male" activities; "sissy" is not acceptable) (Hartup and Moore, 1963; Lansky, 1967; Fling and Manosevitz, 1972; Long et al., 1967; Lekarczyk and Hill, 1969; Goldschmid, 1968).

### Sanctions and Punishments

Boys receive more punishment and sanctions for inappropriate actions than do girls (Minton, Kagan, and Levine, 1971; Block, 1973; Siegelman, 1965).

## No Sex Differences

Variables such as amount of interaction between parent and child (Hatfield, Ferguson, and Alpert, 1967; Clarke-Stewart, 1973); amount of verbal interaction between parent and child (Moss, 1967; Beckwith, 1972); parental warmth (Moss, 1967; Baumrind, 1971); rewards for aggression (Rothbart and Maccoby, 1966; Levitin and Chananie, 1972); praise, reward and positive feedback (Fagot and Patterson, 1969; Feshbach, 1969); and achievement pressure (Baumrind, 1971; Callard, 1968) showed no consistent or significant sex differences.

## Modeling

Behaviors acquired by children through modeling do not seem to be sex-typed (Bandura and Huston, 1971; Hetherington, 1965; Lazowick, 1955; Bandura and Kupers, 1964). However, if a child selectively attends to same-sex models, a sex-typed behavioral repertoire may develop.

## Teacher Behaviors and Attitudes

Teachers and parents have differentiated ideas of what a typical "boy" and "girl" possess in abilities, qualities, and personalities (Ricks and Pyke, 1973; Lee, 1973; Feshbach, 1969; Levitin and Chananie, 1972; Lambert, Yackley, and Hein, 1971). Yet how they perceive boys and girls "should" behave and perform is not stereotyped (Ricks and Pyke, 1973). Boys may receive more intensely directive interactions from teachers, while girls may receive more generalized responses, attention, and verbal interactions (Meyer and Thompson, 1956; Serbin, O'Leary, Kent and Tonick, 1973; Guttentag and Bray, 1976). Teachers expect and reinforce females for passive-dependent behaviors. Passive-dependent males are not well liked or reinforced (Levitin and Chananie, 1972; Martin, 1972). Teachers seem to know more about individual boys and their abilities, qualities, and personalities than they do about girls (Jackson, 1968; Jackson and Gatzels, 1959; Jackson and Lahaderne, 1967).

## Biological Differences

Certain biological differences seem to exist between boys and girls at the elementary level. One critical consideration is that girls enter into first grade at a higher level of physiological development--usually around twelve months (Lee and Gropper, 1974; Maccoby and Jacklin, 1974). Boys also have been found to be more aggressive at these ages than girls (Maccoby and Jacklin, 1974). Although these differences have been found to exist, the nature-nurture controversy has not been resolved and the basic question is one of the extent to which our perceptions of differences cause us to treat girls and boys differentially.

## Male/Female Team Teaching

It was found that male/female team teaching could be effective in reducing sex-role stereotyping of children at the elementary level (Good, Sikes, and Brophy, 1973; Lee and Wolinsky, 1973; Mueller and Cooper, unpublished, 1972). These results were explained by the fact that team teaching with female and male instructors increases children's exposure to a wider range of models than with single-sex instruction.

## Influence of the Media as a Socialization Force

Literature and television influencers were highlighted in this section. It was established that many children's literature and textbooks portray males and females in a stereotypic and traditional manner (Key, 1975; Honingmann, 1967). Popular television shows were also found to stereotype females and males in their presentations (Sternglanz and Serbin, 1974). "Sesame Street" was also cited some years ago for its traditional sex-role attitudes and for fostering stereotypic behaviors (Gardner, 1970) but has made some effort to reduce both sex and race bias in its programming.

## D. Selected Interventions and Resources

Various studies, frameworks, and resources were highlighted to provide selected background and materials for educator-teacher interventions.

There is a differentiation between what occupations children view men and women as being capable of doing and what they themselves choose for occupations (Bacon and Lerner, 1975; Schlossberg and Goodman, 1972; Parks, 1976). A "critical period" for the effectiveness of career development interventions seems to exist at the elementary level (Parks, 1976), emphasizing children's developmental differences. Interventions by Matthews (1975) and TV-CAP were also highlighted. Resource listings for career education materials, interventions, classrooms, and textbook analysis were also provided.

## Conclusion

This selected review of literature has attempted to identify areas of career development and sex-role socialization pertinent to the elementary years. Conceptual models, theories of socialization and empirical studies were examined to help provide a framework for material development for Project BORN FREE. Practical interventions and resources are also described which might be useful to educators in reducing sex-role stereotyping in elementary education. It was noted that while there is an extensive body of literature on sex differences, one must be careful to differentiate what is really known, what is not known, and what is controversial. While the literature appears to suggest lack of differences in such areas as self-concept, achievement motivation, and locus of control in the elementary years, further research on these variables is necessary. An important question is how what an educator believes about sex differences affects her or his attitudes toward and behavior with children. Since the review suggests that sex bias does indeed exist in various forms in the elementary years, it is important for educators to consider ways in which they can intervene to reduce the limits and expand the career options of girls and boys in their institutions and classrooms.

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